

REMARKS

Claims 1, 3-26 and 40-52 appear in this application for the Examiner's review and consideration. New claims 40-52 have been added. Claims 2 and 34-39 have been canceled without prejudice solely to expedite the allowance of the remaining claims. Applicant expressly reserves the right to file one or more continuation and/or divisional applications directed to the subject matter of the canceled claims and/or subject matter of the present amendments.

A "marked-up" version of the claims indicating the changes to the claims is attached hereto as Exhibit A. Matter deleted from the claims is indicated by brackets and added matter is indicated by underlining. A "clean" copy of all the claims, including those as amended, is attached hereto as Exhibit B.

The amendments to claims 1 and 20 are supported by, e.g., the paragraph beginning at page 6, line 16; page 8, lines 1-23; page 9, line 19 through page 10, line 2; page 11, lines 1-19; page 23, line 30 through page 24, line 3; the Figures; and the respective claims as filed. The amendments to claim 6 are supported by, e.g., page 22, lines 26-27. The amendments to claims 10 and 23 are supported by, e.g., page 8, lines 1-23. The amendments to claims 14 and 25 are supported by, e.g., page 13, lines 6-8. The amendments to claim 17 are supported by, e.g., page 18, lines 25-33.

New claims 40, 42 and 45 are supported by, e.g., claims 1 and 20 as amended and the paragraph beginning at page 5, line 3 of the specification. New claims 41, 43 and 46 are supported by, e.g., the paragraph beginning at page 6, line 16; page 8, lines 1-23; and Figures 1 and 2. New claim 44 is supported by, e.g., the paragraph beginning at page 6, line 16; page 8, lines 1-23; page 9, line 19 through page 10, line 2; page 11, lines 1-19; page 23, line 30 through page 24, line 3; the Figures; and claim 1 as amended. New claim 47 is supported by, e.g., claim 6 as amended. New claim 48 is supported by, e.g., the paragraphs beginning at page 22, line 3 and at page 23, line 11 of the specification. New claim 49 is supported by, e.g., claim 9 as amended. New claim 50 is supported by, e.g., claim 10 as amended. New claim 51 is supported by, e.g., claim 12 as amended. New claim 52 is supported by, e.g., claim 14 as amended.

Favorable consideration of the application in view of the amendments and remarks herein is respectfully requested.

1. Objection to the Abstract

The Abstract is objected to in paragraph 5 of the Office Action for its use of the term "comprising". In response, applicant submits the amended abstract above which eliminates the use of that term. Accordingly, applicant submits that this objection has been overcome and requests that it be withdrawn.

2. Rejections under 35 U.S.C. § 112

Claims 1 and 20 are rejected under 35 U.S.C. § 112, ¶ 2, in paragraphs 9 and 10 of the Office Action, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the following terms are objected to:

- (a) "interposed" in paragraph 9; and
- (b) "structure" in paragraph 10.

Furthermore, claims 1 and 20 are rejected under an unspecified paragraph of 35 U.S.C. § 112, in paragraph 12 of the Office Action, as allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention for their use of the term:

- (c) "optionally".

Claims 1 and 20 have been clarified to no longer recite the term "interposed". Instead, twice amended claims 1 and 20 (and also new independent claim 44) recite the term "placed adjacent to", as suggested on page 4 of the Office Action. Applicant respectfully points out that pursuant to, e.g., Figures 1 and 2, "structure" is clearly indicated as a portion of a the container comprising layers 3 and 4 and, if present, layer 2. Nevertheless, twice amended claims 1 and 20 have been clarified to no longer recite the term "structure". Furthermore, twice amended claims 1 and 20 have been clarified to no longer recite the term "optionally". In twice amended claim 1, the bonding layer is present between the support layer and the complexable layer. Applicant notes that, in new claim 44, the bonding layer between the support layer and the complexable layer is absent. Moreover, none of twice amended claim 1 and twice amended claim 20 (and also new claim 44) recite a pressure sensitive adhesive layer optionally comprising two pressure-sensitive adhesive sub-layers. This element is recited in new claims 40 and 42 (and also in new claim 45). Accordingly, applicant submits that these rejections have been overcome and should be withdrawn.

Claims 1, 3, 5, 6, 9, 10, 18-20, 22 and 26 are rejected under 35 U.S.C. § 112, ¶ 2, in paragraph 11 of the Office Action, as allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the following terms are objected to:

- (1) "welded along a seam to form a welded seam" (re claims 1 and 20),
- (2) "said structure is joined to the support layer by lamination" (re claim 3),
- (3) "said structure is joined to the support layer by extrusion-lamination" (re claim 5),
- (4) "the complexable layer is joined to the support layer by hot-calendaring" (re claim 6),
- (5) "said container is thermoformed" (re claims 9 and 22),
- (6) "in which the packaging is opened by tearing and wherein the tearing takes place within the pressure sensitive adhesive layer" (re claim 10),
- (7) "said structure is obtained by collapsing a coextrusion bubble" (re claims 18 and 26), and
- (8) "the coextrusion bubble is collapsed in an oxidizing medium" (re claim 19).

Method limitations in a claim do not render a claim improper under 35 U.S.C. § 112, ¶ 2. (See, e.g., MPEP § 2173.95(g) ("There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper.")) Further, as discussed below, the above-rejected terms are related to the recited article as follows:

Term (1) relates to an article limitation. The tearable welding layer (4 in Figures 1 and 2) and the welding layer (5 in Figures 1 and 2) are welded or fused together along the seam to form a weld or welded seam. The welded seam is an article limitation. If the welded seam were absent, then the layers 4 and 5 would be merely adjacent layers in the claimed article, not welded together to form the recited welded seam.

Terms (2) and (3) relate to an article limitation. As known to those skilled in the art and as explained by, e.g., the second, third and fourth full paragraphs on page 22 of the specification, lamination involves the use of an adhesive-type bonding layer or a coextrusion binder. In any case, the layers to be laminated are connected by a bonding layer. When the bonding layer is an adhesive, no heating above the melting temperature is required, i.e., this is

a relatively cold lamination process. Therefore, at the interface of the complexable layer/bonding layer bonded by lamination with an adhesive, a cold process, there will not be any signs of melting. In contrast, when the bonding layer is a coextrusion binder, heat is required to melt the coextrusion binder and impart bonding properties, i.e., this is a relatively hot lamination process. Therefore, at the interface of the complexable layer/bonding layer bonded lamination with a coextrusion binder, e.g., extrusion-lamination, a hot process, there will be signs of melting. Thus, the interface of the complexable layer/bonding layer bonded by lamination with a coextrusion binder, e.g., extrusion-lamination (a hot process), will differ from the interface of the complexable layer/bonding layer bonded by lamination, e.g., with an adhesive, because there will be signs of melting in the former.

Term (4) is no longer recited in claim 6.

Term (5) relates to an article limitation. Those skilled in the art recognize that the state of molecular orientation of the article, a container, differs depending on how the container is made. A thermoformed container is known to those in the art as one formed from a sheet by thermoforming, i.e., (1) a sheet is made, typically by extruding a melted polymer, (2) the sheet is solidified, typically by cooling it, and (3) the container is thermoformed from the rigid sheet by softening, but not melting, the sheet and shaping it into the form of the container. For example, see the description of thermoforming in Example 1 of the present specification (e.g., the second full paragraph on page 25). In contrast, a molded container is shaped directly from a melted polymer into the form of the container, bypassing the intermediate sheet-forming step 1 and solidification step 2. Thus, a thermoformed container differs from a molded container, *inter alia*, because the latter cannot be characterized by the molecular orientation introduced into the sheet in step 1 and frozen into the sheet by solidifying in step 2, which is not entirely released by softening, but not melting, the sheet in step 3.

Term (6) relates to an article limitation. Claim 10 recites a reclosable packing. As illustrated in Figure 2 and as explained by the specification at, e.g., the first paragraph on page 8, reclosability is achieved by tearing through the pressure-sensitive adhesive (PSA). A portion of the PSA 10 on one side of the tear remains on the tearable welding layer 9 which remains joined to the lid B of the container. Another portion of the PSA 3 remains on the container A on the other side of the tear, either on the complexable layer 2 if it is present or on the support layer 1 if the complexable layer is absent. Providing a PSA on either side of

the tear is an article feature that provides the recited reclosability to the packaging, by pressing these PSA portions back together.

Moreover, "wherein the tearing takes place within the pressure sensitive adhesive layer" indicates that the rupture is cohesive, i.e., that cohesive failure of the PSA occurs to open the packing, as explained by the specification at, e.g., the first paragraph on page 9. That is, the PSA is the "weak link" and tears under the applied force rather than tearing occurring at the PSA/tearable welding layer interface or at the PSA/complexable layer interface (if present) or at the PSA/support layer interface (if present).

Term (7) is recited in granted claim 1 of U.S. Patent No. 6,511,723 B1, a copy of which is attached hereto as Exhibit C for the convenience of the Examiner. Moreover, as explained by the specification at, e.g., the first paragraph on page 9, the bubble collapsing method is one way to provide for the article limitation of tearing or cohesive failure within the PSA layer of the article.

Term (8) is recited in granted claim 2 of U.S. Patent No. 6,511,723 B1. Moreover, as explained by the specification at, e.g., the first full paragraph on page 19, the presence of an oxidizing medium in the coextrusion bubble alters the article by producing surface oxidation of the adhesive layer, thereby reducing the force needed to retear the adhesive at that oxidized surface after resealing, e.g. as resealing is illustrated in the "after" or collapsed bubble portion of Figure 3.

Accordingly, applicant submits that each of these rejections has been overcome and requests that they be reconsidered and withdrawn.

Accordingly, as all of the rejections under 35 U.S.C. § 112 has been overcome, applicant respectfully requests that they be withdrawn.

3. Rejection of Claims 1, 3, 5, 6, 9, 10, 14, 20, 22, 25 and 26 under 35 U.S.C. § 103(a)

Claims 1, 3, 5, 6, 9, 10, 14, 20, 22, 25 and 26 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 4,810,541 to Newman et al. ("Newman") in view of U.S. Patent No. 5,512,124 to Hansen ("Hansen") and U.S. Patent No. 5,037,138 to McClintock et al. ("McClintock") in paragraph 16 of the Office Action. Applicant respectfully traverses.

The Examiner has the burden under Section 103 to establish the *prima facie* obviousness of the novel methods claimed in the present application. *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Three elements must be shown: (1) a particular prior art reference (or references when combined) teaches or suggests all of the limitations of the claim challenged; (2) a suggestion or motivation exists in the prior art to make any required modification or combination in/of the references cited against the claim; and (3) there is a reasonable expectation of success. MPEP § 2142. Both the suggestion and expectation of success must be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Without this teaching, suggestion or motivation, the mere fact that the references can be combined, is insufficient to support an obviousness rejection. See MPEP §2143.01.

"Obvious to try" is not the standard under § 103. Exploration of a new technology or general approach that seems to be a promising field can at the same time be "obvious to try" but legally nonobvious under § 103. *In re O'Farrell*, 853 F.2d at 903, 7 USPQ2d at 1681. A mere obvious to try is not enough to establish *prima facie* case of obviousness; there must be a reasonable expectation of success. *Amgen, Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F.2d 1200 (Fed. Cir. 1991). A requirement for a showing of unexpected results is improper unless the Examiner has produced evidence to support a *prima facie* case that an invention is obvious. *In re Oetiker*, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992) ("If examination at the initial stage does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of the patent.").

Applicant respectfully points out that Newman does not disclose reclosable packaging. Newman's layers 15 and 16 referred to in the Office Action are made of copolymers of ethylene and vinyl acetate in certain proportions ("EVA") or acrylate copolymers (see col. 4, lines 42-53). Applicant contests the Office Action's allegation that the hot-melt EVA adhesive of Newman could be, through routine experimentation, modified into a PSA. Newman discloses EVA through his specification as adhesives for their adhering nature, e.g., "to provide adhesion between the various layers of the sheet" (col. 4, lines 43-44) and which are not designed to be rupturable. Indeed, having PSAs be present in Newman's layers 15 and 16 would contradict Newman's teachings and negate the purpose of Newman's invention.

In particular, the adhesives in Newman's plastic containers are extremely strong adhesives because "the lid 13 can be readily and smoothly separated by hand without tearing of either the lid 13 or the flange 12a ..." (col. 6, lines 7-10). Such disclosure excludes and, in fact, teaches away from, the reclosable packages of the present invention, the opening of which involves tearing in a welding region and forming a first and a second PSA sub-layer from the PSA layer, thereby exposing part of the PSA layer. Thus, one of ordinary skill in the art, even only for the sake of argument having knowledge of the disclosures of Hansen and McClintock, would have no motivation to modify the EVA-based adhesive of Newman to a PSA such as of the type used in reclosable packages.

Furthermore, even if, only for the sake of argument, one of ordinary skill in the art were to modify the EVA-based adhesive of Newman to a PSA, a major technical problem relating to opening the package would still exist. Newman's EVA-based adhesive layers 15 and 16 are used to adhere the gas-barrier 14 to the other layers comprising the cup 11. If the adhesive in layers 15 and 16, i.e., the layers on either side of the gas-barrier layer, were to be replaced by a PSA as the Office Action advocates, when tearing the tab to open the package there would be an equal chance that a delamination would occur in either PSA layer 15 or 16. In either case, even upon completion of tearing in that layer, there would be no access to the contents of the package. Only certain layers of the container would have separated from each other, but lid 13 and at least layers 19 and 17 of cup 11 would remain and continue to encapsulate the contents of the package.

For any and/or all of the above reasons, the EVA-based adhesive of Newman are not "functionally equivalent" to PSAs, as alleged in the Office action.

Also, the mechanism disclosed at col. 6, lines 6-10 of Newman is clearly directed to a separation at the interface between layer 22 and layer 19 when the package is opened. Thus, there will be no rupture of the layers in the flange of the container. In contrast, the present invention, e.g., as depicted in Figure 2 and as recited in, *inter alia*, claims 10, 23, 41, 43, 46 and 50, features opening by a separation within the PSA layer to form two PSA sub-layers, one of which is connected to the cover and the other of which is connected to the container.

Thus, for at least the above reasons, the combination proposed by the Office Action fails to suggest a reclosable packaging and Newman even teaches away from the same. Accordingly, applicant submits that the rejection of certain claims as unpatentable over

Newman in view of Hansen and McClintock has been overcome and respectfully request that this rejection be reconsidered and withdrawn.

4. Rejection of Claims 1, 3, 5-10, 14, 16, 20, 22 and 26 under 35 U.S.C. § 103(a)

Claims 1, 3, 5-10, 14, 16, 20, 22 and 26 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 6,345,726 to Beeuwsaert ("Beeuwsaert") in paragraph 17 of the Office Action. Applicant respectfully traverses.

Beeuwsaert discloses a packaging where the lid comprises a tearable weldable layer (3), and the tray comprises, in the following order from the bottom of the tray to the lid, a supporting layer (5), an intermediate layer of PSA (6), and a weldable layer (7). (See Beeuwsaert's Figure 3, the abstract and the claims). Pursuant to col. 4 lines 44-53 and Beeuwsaert's Figure 2, each of layers (3) and (7) may comprise 5 sub-layers. However, during the opening of Beeuwsaert's packaging, each of component layers of (3) and (7) behaves as if it were a unitary layer, i.e., each sub-layer of (3), and each sub-layer of (7), remains bonded to the adjacent sub-layer(s) of that layer and acts in concert with the other sub-layers of either layer (3) or layer (7). (See col. 5, lines 22-27 and, in particular, Beeuwsaert's Figure 3). Therefore, Beeuwsaert does not disclose, or even suggest, a complexable layer between Beeuwsaert's support layer (5) and Beeuwsaert's PSA layer (6). In contrast, the present invention features such a complexable layer, e.g., the corona-treated PE complexable layer in each of Examples 1 and 2 of the present invention (page 24, lines 18-26 and page 26, lines 20-32, respectively).

Moreover, layers 9 and 10, referred to in the final paragraph on page 7 of the Office Action, while sub-layers of the unitary weldable layer (7), are not complexable layers. Simply because Beeuwsaert's layers 9 and 10 are sublayers of his layer 7 does not lead to the conclusion that Beeuwsaert's layers 9 and 10 are complexable layers. It is not possible to state, simultaneously, that: (1) Beeuwsaert's layers 9 and 10 are complexable layers and (2) layers 9-13 together form a tearable welding layer. Additionally, layers 9 and 10 are not in contact with Beeuwsaert's support layer (5).

Thus, Beeuwsaert cannot suggest the present invention since it fails to even suggest a tearable welding layer (4 in Figure 1 of the present specification) in contact with a PSA layer (3 in Figure 1 of the present specification), which is, in turn, in contact with a complexable

layer (2 in Figure 1 of the present specification), which is, in turn, in contact with a support layer (1 in Figure 1 of the present specification) either directly or through a binder layer (7 in Figure 1 of the present specification).

The Office Action alleges that it would have been obvious to rearrange the layers of Beeuwsaert such that a complexable layer is situated between the PSA layer and the support layer. However, the motivation for doing so, by law provided within Beeuwsaert itself, is lacking. First, the understanding of "complexable layer" as Beeuwsaert's layers 9 and 10 is not correct for all of the reasons discussed above. Second, since each of Beeuwsaert's layers 3, 6 and 7 has a defined function and each is placed in the order or position disclosed in Beeuwsaert because of that function, there is no motivation provided by the Beeuwsaert reference to "rearrange" Beeuwsaert's layers within that function. "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims ... is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device." *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984). See also MPEP § 2144.04(VI)(C); *cf. In re Japikse*, 86 USPQ 70, 73 (CCPA 1950) ("[T]here would be no invention in shifting the starting switch ... to a different position since the operation of the device would not thereby be modified.") (emphasis added).

Layers 9/10/11/12/13 of Beeuwsaert are disclosed or hypothesized to be PE/binder/oxygen-barrier/binder/PE, respectively (see col. 2, line 51, col. 4, lines 46-47). The passage of Beeuwsaert the Office Action cites, i.e., col. 4, lines 44-53, refers to with Beeuwsaert's layers (3) and (7) themselves and not to their component layers. Only for the sake of argument, even if Beeuwsaert's sublayers were to be rearranged within one layer, for example, if Beeuwsaert's layer (7) were to be made up of layers 9/11/10/12/13, respectively, it is noted that layer 11 is still within PE outer layers 9 and 13. In any event, any hypothetical "rearrangement" within each of Beeuwsaert's individual layers (3) and (7) does not provide any motivation for placing Beeuwsaert's adhesive layer (6) within layer (7) where its function would not be the same, i.e., making a modification in how Beeuwsaert's packaging operates. Beeuwsaert discloses that his layer (6) is between the support layer (5) and the welding layer (7), i.e., external to welding layer (7), not within welding layer (7).

Accordingly, applicant submits that the rejection of the claims as unpatentable over Beeuwsaert has been overcome and respectfully requests that this rejection be reconsidered and withdrawn.

5. Rejection of Claims 2, 4, 11, 12, 17-19, 21 and 23-25 under 35 U.S.C. § 103(a)

Claims 2, 4, 11, 12, 17-19, 21 and 23-25 are rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Beeuwsaert in view of:

- U.S. Patent No. 3,454,210 to Spiegel et al. ("Spiegel"),
- the Material Safety Data Sheet for PENTALYN H-55WBX ("PENTALYN MSDS"),
- the *Material Safety Data Sheet* for PETROFLEX SBR ("PETROFLEX MSDS"),
- the *Encyclopedia of Polymer Science and Technology* internet entry for *Ethylene Polymers, LLDPE* ("Ethylene Polymers"),
- WO 97/19867 to Engelaere ("Engelaere"), and
- U.S. Patent No. 4,791,024 to Clerici et al. ("Clerici")

in paragraph 18 of the Office Action. The invention recited in the rejected claims is not rendered obvious by the proposed combination because, *inter alia*, these references do not even suggest the structures recited in the claims. The secondary references are discussed briefly below, the primary Beeuwsaert reference having already been discussed in the previous section, followed by a discussion of the combination proposed in the Office Action.

A. Spiegel

Spiegel is primarily concerned with a rather old embodiment of a reclosable packaging where the PSA is in the cover or lid rather than in the container.

Spiegel discloses two distinct multi-layer structures or laminates, referred to as a "30" and "31" in Figure 5 and, respectively, as "14" and "10" in Figures 1-4 therein. Cover layer structure 30 (and 14) is made up of a saran-coated polyester layer 15, a polyethylene layer 16, a PSA layer 17, and a polyethylene layer 18 (col. 2, lines 40-46; col. 4, lines 37-39). The polyethylene layer 18 is bonded to a polyethylene layer 12 of a base structure 10 made from a laminate of polyvinyl chloride 11 with the polyethylene layer 12 (col. 2, lines 29-32) or to a polyethylene layer 32 of a base structure 31 made from a laminate of nylon with the polyethylene layer 32 (col. 4, lines 39-43). Thus, there is no specific disclosure, or even any

suggestion, of a semi-rigid container having a rigid layer of PVC, a layer of PE, a layer of PSA and a layer of PE.

In Spiegel, support 15 is corona treated, then coated with a layer of PE, the PE itself, in fact, is two subsequent sub-layers. Then this layer is corona treated and a layer of PSA is applied. Then another layer of PE, previously also corona treated, is applied. Thus, the manufacturing process involves at least 5 distinct process steps and a structure, as recited in the present claims, is not applied. In contrast, in the present invention, a structure comprising 3 layers would be applied, minimizing steps, and the layer coming into contact with the support is a complexable layer.

Spiegel discloses that his adhesive is deposited as a solution. In contrast, the thermoplastic-elastomer based hot melt PSAs recited in claims 12 and 24 are extrudable, e.g., deposited from the melt. In particular, Spiegel teaches that a milled GR-S rubber (i.e., styrene-butadiene rubber or SBR) adhesive composition "is applied with a coating roll and the web is then dried to insure removal of all solvent" (col. 3, lines 4-10). Thus, as a solvent is present in Spiegel's adhesive, that adhesive is not an extrudable polymer or copolymer and Spiegel does not even suggest extruding his adhesive.

Applicant explicitly disputes the contention in the final paragraph on page 9 of the Office Action that "[A]lthough Spiegel does not explicitly state whether the adhesive layer has a melting point lower than that of the welding layer, the property is inherently met as evidenced by [PENTALYN MSDS, PETROFLEX MSDS and Ethylene Polymers]" (emphasis added). Applicant submits that resorting to inherency in an obviousness rejection is legally improper because, *inter alia*, "[A] retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection." (*In re Rijckaert*, 9 F.3d 1531 (Fed. Cir. 1993)) and "[A] retrospective view of inherency is not a substitute for some teaching or suggestion which supports the selection and use of the various elements in the particular claimed invention." (*In re Newell*, 891 F.2d 899 (Fed. Cir. 1989)).

B. PENTALYN MSDS, PETROFLEX MSDS and Ethylene Polymers

First, applicant notes that each of PENTALYN MSDS, PETROFLEX MSDS and Ethylene Polymers is not prior art to the above-captioned application. Each reference bears a publication date in the year 2002, after the filing date of the above-captioned application. For

this reason, applicant requests that the combination obviousness rejection, based on each of these secondary references, be withdrawn.

For the sake of argument, putting aside whether the citation of these references is even proper and the legal issue of whether the doctrine of inherency is even properly applied in an obviousness rejection, inherency, as mandated by the applicable case law and the description requirement of 35 U.S.C. §102, requires a distinct showing that the inherent characteristic necessarily be present in the prior art reference. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047 (Fed. Cir. 1995).

With regard to Spiegel's polyethylene component, the Office Action concedes that "Spiegel does not explicitly state whether the adhesive layer has a melting point lower than that of the welding layer [Spiegel's polyethylene component]" The Office Action asserts, through the disclosure on page 4 of the PETROFLEX MSDS, that the melting point of SBR and, by analogy, Spiegel's adhesive layer, is 100°C. The Office Action also asserts, through the disclosure on pages 6-7 of the Ethylene Polymers, that the melting point of polyethylene and, by analogy, Spiegel's polyethylene layer, is always above 100°C. Based on these assertions, the Office Action concludes that the limitation that "the adhesive layer has a melting point lower than that of the welding layer is inherently met [by Spiegel] ...". However, applicant provides evidence, in Exhibit D, that the melting point of polyethylene is not always above 100°C. Exhibit D reproduces a section of the mid-October 1989 issue of the journal *Modern Plastics*, also known as the *Modern Plastics Encyclopedia*. In a table providing properties of plastics, *inter alia* the melting temperature, page 627 discloses that the melting temperature of low and medium density branched polyethylene homopolymers is 98-115°C. This evidence demonstrates that the melting point of polyethylene is not always above 100°C, as the Office Action asserts.

Thus, the evidence provided in Exhibit D contradicts the Office Action's conclusion that the limitation that "the adhesive layer has a melting point lower than that of the welding layer is inherently met [by Spiegel]" because "[i]nherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 1269 (Fed. Cir. 1991) (emphasis in original). Speculation, however, as with "probabilities or possibilities" does not satisfy the first part of the inherency test. *Id.* at 1269. Thus, in order for a claim to be inherent in the prior art, it is not sufficient that a person

following the disclosure sometimes obtain the result set forth in the claim, it must invariably happen. *Glaxo, Inc. v. Novopharm Ltd.*, 830 F. Supp. 871, 874 (E.D.N.C. 1993) citing to *Standard Oil v. Montedison*, 664 F.2d 356, 372 (3d Cir. 1981). Because the melting point of polyethylene is only sometimes greater than the melting point of SBR and is not invariably greater than the melting point of SBR, applicant respectfully submits that the Office Action's conclusion that the limitation that "the adhesive layer has a melting point lower than that of the welding layer is inherently met [by Spiegel]" cannot stand.

For at least this additional reason, applicant requests that the combination obviousness rejection be withdrawn.

C. Engelaere

Engelaere discloses a packaging wherein the PSA is in the lid, in contrast with the present invention where the PSA is in the container. The Engelaere lid comprises a support layer 2 (e.g., biaxially oriented polyester), a PSA layer 3, and a rupturable weldable layer 1. (See, e.g., page 7, lines 12-17; page 8, lines 24-25; page 9, lines 8-14; page 14, lines 22-27; and Figures 1 and 4). However, in Engelaere, there is no layer between the support layer 2 and the PSA layer 3. Therefore, Engelaere neither discloses nor suggests a complexable layer, in contrast to the presently claimed invention.

D. Clerici

The subject of the Clerici patent, according to its title, is a "Dismemberable Adhesive Junction System" wherein, pursuant to col. 3, lines 32-34, the adhesive element is in the form of a fabric-carrier tape bearing an adhesive. As such, applicant submits that Clerici is not drawn from analogous art to the present invention and, therefore, should not be cited against the present claims.

A reference is from an analogous art if either it is "within the field of the inventor's endeavor" or if it "is reasonably pertinent to the particular problem with which the inventor was involved." *In re Paulsen*, 30 F.3d 1475, 1481 (Fed. Cir. 1994); *Heidelberger Druckmaschinen AG v. Hantscho Commercial Products*, 21 F.3d 1068, 1972 (Fed Cir 1994); *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986). The scope of prior art is limited to that which is reasonably pertinent to the particular problem to which the invention is directed. "In

evaluating obviousness, the hypothetical person of ordinary skill in the pertinent art is presumed to have the 'ability to select and utilize knowledge from other arts reasonably pertinent to [the] particular problem to which the claimed invention is directed.'" *Nobell Inc. v. Sharper Image Corp.*, 16 USPQ2d 1380, 1382 (N. D. Cal. 1990), quoting *In re Antle*, 444 F.2d 1168, 1171-2; 170 USPQ 285, 287-8 (Ct. Cl. 1971). The Office Action does not contest that Clerici is not within the applicant's field of endeavor. See paragraph 22 on page 14.

One particular problem to which the present invention is directed is obtaining a package that can be used under pressure or vacuum, that is either rigid or flexible, and that can be used in diverse types of existing packaging equipment, e.g., horizontal form, fit and fill ("FFF") equipment and vertical FFF equipment (page 2, lines 24-28). Clerici does not disclose that his adhesive junction system is compatible with the operation of FFF equipment; in fact, Clerici does not even discuss FFF equipment. Another particular problem to which the present invention is directed is avoiding the use of costly ionomer resins, which make the packaging in which they are used relatively expensive (page 2, lines 30-33). Clerici, not even disclosing ionomer resins, has no pertinence to this problem as well.

The Office Action asserts, on page 14, that Clerici is pertinent to a problem addressed by the present invention because Clerici discloses that "any number of different materials can be used, provided that they have a sufficient consistency and resistance relative to the elastomeric material so as to make the separation" of the joined surfaces possible without jeopardizing the functionality of the whole system, i.e., that "any material can be used as long as it can be used." This disclosure of Clerici provides absolutely no guidance as to what substrates, other than Clerici's disclosed fabric-carrier tape, woven cotton fabric and polyvinylchloride tape, it is applicable to. Moreover, the Office Action states that Clerici is used to demonstrate a two-layered adhesive and its use in a situation wherein two opposing substrates are intended to be disjointed. However, the Office Action does not mention that Clerici's disclosure relates to opposing substrates that are like elements, e.g., see claim 1, Figure 2 and the Clerici abstract. In particular, Clerici's claim 1 recites that "two like elements are to be repeatedly connected together and released" (emphasis added). Figure 2 discloses each adhesive is "a" and each carrier is "b", regardless of whether it is located in piece "10" or piece "11". Moreover, Clerici discloses that his two-layer adhesive "junction system affords the advantage of having a comparatively reduced thickness which is anyhow thinner than that of a junction made of two fabrics fitted with hooking elements and loop elements projecting therefrom, respectively", i.e., is thinner than a previous way of joining

two pieces of fabric. (col. 3, lines 1-6). In contrast, the present invention, having a tearable welding layer on one side of its PSA layer within the container and either a complexable layer or a support layer, also within the container, on the opposite side of the PSA, need not have opposed like fabric elements that are to be repeatedly connected. Thus, Clerici is not reasonably pertinent to a particular problem to which the invention is directed.

Therefore, because Clerici is neither "within the field of the inventor's endeavor" nor "reasonably pertinent to the particular problem with which the inventor was involved," applicant submits that Clerici should not be cited to reject the present claims. For at least this reason, applicant requests that the combination obviousness rejection, based on the secondary Clerici reference, be withdrawn.

Nevertheless, Clerici discloses that there is no layer between the adhesive and its supporting layer. For example, Figure 2 of Clerici discloses his elastomeric material 10b directly in contact with carrier 10a and his elastomeric material 11b directly in contact with carrier 11a (see col. 3, lines 24-30).

E. The Combination of Beeuwsaert in View of Spiegel, PENTALYN MSDS, PETROFLEX MSDS, Ethylene Polymers, Engelaere and Clerici

The Office Action alleges in paragraph 18 that claims 2, 4, 11, 12, 17-19, 21 and 23-25 are unpatentable over the combined teachings of 7 references: Beeuwsaert in view of Spiegel, PENTALYN MSDS, PETROFLEX MSDS, Ethylene Polymers, Engelaere and Clerici. Applicant respectfully traverses for the following additional reasons.

If it is not shown that the prior art gives a reason or motivation to make the claimed compositions, then there is no *prima facie* case and the applicant should prevail. *In re Grabiak*, 769 F.2d 729 (Fed. Cir. 1985). Care must be exercised not to use the applicant's disclosure to fill in the gaps in the prior art. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991); *In re Grabiak*, 769 F.2d 729 (1985).

First, as each of PENTALYN MSDS, PETROFLEX MSDS and Ethylene Polymers is not prior art to the above-captioned application, whether cited alone or in combination, these references are not within the limited scope of prior art that can be cited against the present claims.

Second, Clerici is neither within the applicant's field of endeavor nor is this reference reasonably pertinent to either of these particular problems addressed by the present invention, as discussed above. Therefore, Clerici, whether cited alone or in combination, is not within the limited scope of prior art that can be cited against the present claims.

However, even if for the sake of argument the references are combined as suggested in the present Office Action, applicant submits that none of Beeuwsaert, Spiegel, PENTALYN MSDS, PETROFLEX MSDS, Ethylene Polymers, Engelaere and Clerici disclose or even suggest the present invention, *inter alia*, because:

- A complexable layer, missing from at least Beeuwsaert, Engelaere and Clerici, would need to be added between the PSA layer and the support layer,
- Spiegel's central adhesive layer would need to be discarded,
- In favor of a PSA of one of the other references, however,
- Clerici's adhesive carrying fabric support used with a PSA would need to be discarded because it is not extrudable.

Thus, the proposed combination of references fails to teach or suggest all of the limitations of the claims. Therefore, there can be no *prima facie* obviousness.

Where the proposed combination of art does not arrive at the claimed composition, obviousness does not result merely because the prior art could be modified. *In re Laskowski*, 871 F.2d 115 (Fed. Cir. 1989). Furthermore, the Office Action points to no suggestion or motivation existing within the collective references to make the combination and the required modification discussed above. Applicant submits that, *inter alia*, none of the cited references provide, within the collective disclosure of these references, one of ordinary skill in the art with the suggestion or motivation to combine their teachings and make the numerous modifications required to even approach the presently claimed invention. Therefore, there is no *prima facie* obviousness for at least this reason as well.

Even if, only for the sake of argument, the references were to be combined as suggested in the present Office Action, the presently claimed invention could be, at most, merely obvious to try, which is insufficient to establish *prima facie* case of obviousness because a reasonable expectation of success would be lacking. Applicant submits that because, *inter alia*, so many modifications of the disclosures of the references would be required, as described above, to even approach the presently claimed invention, that the expectation of success for such modifications, were they even to be undertaken, cannot be

found within the collective references. The expectation of success must be found in the references, not in applicant's disclosure, and the present Office Action points to no such suggestion in any reference. Therefore, there is no *prima facie* obviousness for at least this additional reason.

To support a rejection for lack of obviousness under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1575 (Fed. Cir. 1984). The prior art must teach or suggest all of the claim limitations. MPEP §2143. Where the proposed combination of art does not arrive at the claimed composition, the mere fact that the prior art could be so modified does not render obvious the claimed compositions unless the prior art suggested the desirability of the modification. *In re Gordon*, 733 F.2d 900, at 902 (Fed. Cir. 1984). The prior art must provide one of ordinary skill in the art with the motivation to make the modifications required to arrive at the claimed composition. *In re Lulu*, 747 F.2d 703 at 705 (Fed. Cir. 1984). Both the suggestion and expectation of success must be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Moreover, claims 12 and 24 recite, *inter alia*, a thermoplastic elastomer-based hot melt adhesive. Spiegel discloses that his adhesive is a milled GR-S rubber adhesive composition and "is applied with a coating roll and the web is then dried to insure removal of all solvent" (col. 3, lines 4-10). As discussed in the previous Amendment filed on August 26, 2002, those of ordinary skill in the art recognize that GR-S rubber is synonymous with SBR rubber, i.e., styrene-butadiene rubber. As discussed in Exhibit M to the previous Amendment, under the heading "Processing of SBR" on page 395, the processing differences between GR-S/SBR and other rubbers, such as natural rubber, are minor. Therefore, GR-S, like natural rubber, is not extrudable, but must be deposited as a layer in some other form, e.g., by drying to remove the solvent from Spiegel's GR-S coating solution. In contrast, the thermoplastic elastomer-based hot melt adhesive recited in claims 12 and 24 is based on a thermoplastic elastomer that is extrudable. Thus, for at least this additional reason, one of ordinary skill in the art would recognize that Spiegel's GR-S/SBR rubber and an extrudable thermoplastic elastomer are not interchangeable and cannot be freely substituted.

Applicant submits that there is no *prima facie* obviousness because none of Beeuwsaert, Spiegel, PENTALYN MSDS, PETROFLEX MSDS, Ethylene Polymers,

Engelaere, Clerici, or the proposed combination, teaches or even suggests all of the limitations of claims 12 and 24, the Office Action fails to specify a suggestion or motivation existing in the collective reference(s) to make any required modification of the reference(s) cited against this claim, and/or the Office Action fails to specify a reasonable expectation of success existing in the collective reference(s) even if the required modifications were made.

Furthermore, regarding claim 19, it recites collapsing the co-extrusion bubble in an oxidizing medium. Spiegel discloses an electrostatic discharge treatment to, e.g., the exposed surfaces of his polyethylene layers 16 and 18, to oxidize those surfaces and increase their wettability to water before his adhesive is contacted therewith (col. 3, lines 1-4 and 11-16; col. 4, lines 48-52). Thus, Spiegel does not disclose or even suggest any oxidizing treatment of his adhesive, just oxidizing treatment of a layer to which the adhesive is applied or contacts. In contrast, the recited oxidizing medium clearly refers to the oxidizing nature of the medium inside of the co-extrusion bubble. For example, the specification, at page 19, lines 10-13, discloses that when extruding the tube or bubble, air is generally employed for blowing or expanding the bubble, not unlike how air is used to expand a balloon, and the air produces a slight surface oxidation of the adhesive layer inside the bubble, e.g., the innermost surface of adhesive layer 3 in Figure 3 "Before". The specification further discloses that ozone can be employed as the oxidizing agent (page 19, lines 19-21). Thus, the present claims recite an oxidizing treatment of the adhesive.

Applicant submits that there is no *prima facie* obviousness because none of Beeuwsaert, Spiegel, PENTALYN MSDS, PETROFLEX MSDS, Ethylene Polymers, Engelaere, Clerici, or the proposed combination, teaches or even suggests all of the limitations of claim 19, the Office Action fails to specify a suggestion or motivation existing in the collective reference(s) to make any required modification of the reference(s) cited against this claim, and/or the Office Action fails to specify a reasonable expectation of success existing in the collective reference(s) even if the required modifications were made.

Additionally, regarding claim 11, it recites that the tearable-welding layer's melting point is greater than the PSA layer's melting point. Because Spiegel's disclosure cannot legally be relied upon for the reasons discussed above to supply a missing property not disclosed or suggested, only alleged to be inherently present, applicant submits that there is no *prima facie* obviousness because none of Beeuwsaert, Spiegel, PENTALYN MSDS, PETROFLEX MSDS, Ethylene Polymers, Engelaere, Clerici, or the proposed combination,

teaches or even suggests all of the limitations of claim 11, the Office Action fails to specify a suggestion or motivation existing in the collective reference(s) to make any required modification of the reference(s) cited against this claim, and/or the Office Action fails to specify a reasonable expectation of success existing in the collective reference(s) even if the required modifications were made.

Therefore, applicant submits that the rejection of the claims over the cited combination of seven references has been overcome and respectfully request that the rejection be withdrawn.

6. Rejection of Claim 13 under 35 U.S.C. § 103(a)

Claim 13 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Beeuwsaert in view of U.S. Patent No. 5,167,339 to Takata et al. ("Takata") in paragraph 19 of the Office Action. The invention recited in the rejected claim is not rendered obvious by the proposed combination because, *inter alia*, these references do not even suggest the structures recited in the claims. Applicant respectfully traverses.

As conceded on page 12 of the present Office Action, "Beeuwsaert fails to teach an adhesive comprising from 5-25% by weight of filler or processing agent within the adhesive." Therefore, the Office Action cites Takata for its disclosure of "a resealable container that has an adhesive that contains between 0 and 95% filler for the purpose of providing a container with a desirable peel strength as well as to provide an adhesive with high heat resistance." Applicant disputes the contentions on page 12 of the Office Action that "it would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicant's invention was made to have modified an adhesive layer within a re-sealable container to include between 0 and 95% filler for the purpose of providing a container with a desirable peel strength and high heat resistance as taught by Takata et al." and "it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have modified Beeuwsaert to include filler within the adhesive layer of the re-sealable container as taught by Takata et al."

As discussed in Section 4 above, Beeuwsaert fails to teach or even suggest, *inter alia*, a complexable layer between the PSA and the support layers. The Office Action makes neither an allegation nor presents any evidence that Takata can overcome this deficiency.

Applicant submits that there is no *prima facie* obviousness because none of Beeuwsaert, Takata, or the proposed combination, teaches or even suggests all of the limitations of claim 13, the Office Action fails to specify a suggestion or motivation existing in the collective reference(s) to make any required modification of the reference(s) cited against this claim, and/or the Office Action fails to specify a reasonable expectation of success existing in the collective reference(s) even if the required modifications were made.

Therefore, applicant submits that the rejection of the claim over the cited combination of references has been overcome and respectfully request that the rejection be withdrawn.

7. Rejection of Claim 15 under 35 U.S.C. § 103(a)

Claim 15 is rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Beeuwsaert in view of U.S. Patent No. 5,882,749 to Jones et al. ("Jones") in paragraph 20 of the Office Action. The invention recited in the rejected claims is not rendered obvious by the proposed combination because, *inter alia*, these references do not even suggest the structures recited in the claims. Applicant respectfully traverses.

As conceded on page 12 of the present Office Action, "Beeuwsaert ... fails to explicitly teach the use of metallocene polyethylene." Therefore, the Office Action cites Jones for its disclosure of "polyethylene metallocene in the outer weldable layers of a re-closable package for the purpose of producing a heat sealable layer." Applicant disputes the contention on pages 12-13 of the Office Action that "it would have been obvious through routine experimentation to one of ordinary skill in the art at the time applicant's invention was made to have used metallocene polyethylene in a resealable container ... as taught by Jones et al."

As discussed in Section 4 above, Beeuwsaert fails to teach or even suggest, *inter alia*, a complexable layer between the PSA and the support layers. The Office Action makes neither an allegation nor presents any evidence that Jones can overcome this deficiency. Applicant submits that there is no *prima facie* obviousness because none of Beeuwsaert, Jones, or the proposed combination, teaches or even suggests all of the limitations of claim 15, the Office Action fails to specify a suggestion or motivation existing in the collective reference(s) to make any required modification of the reference(s) cited against this claim,

and/or the Office Action fails to specify a reasonable expectation of success existing in the collective reference(s) even if the required modifications were made.

Therefore, applicant submits that the rejection of the claims over the cited combination of references has been overcome and respectfully request that the rejection be withdrawn.

8. Conclusion

In view of all of the above amendments and remarks, applicant respectfully submits that all of the objections and rejections have been overcome. Therefore, it is believed that the present application is in condition for allowance, early notice of which would be appreciated.

No fees, other than that for extending the period for response and for the additional claims, are believed due for this submission. However, should any additional fee(s) be required, the Patent and Trademark Office is authorized to charge the requisite amount to Pennie & Edmonds LLP's Deposit Account No. 16-1150.

Respectfully submitted,

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Enclosure

EXHIBIT A

MARKED-UP VERSION OF THE CLAIMS AMENDED U.S. PATENT APPLICATION SERIAL NO. 09/574,836

The rewritten claims were revised as follows:

1. (Twice amended) A re-closable packaging comprising a container and a cover;

wherein the container comprises a support layer bearing two opposed faces, the innermost face of which is joined to a complexable layer by [optionally interposing] placing said face [on] adjacent to an outermost face of a [an optional] bonding layer bearing two opposed faces[;],

the [optional] bonding layer is placed adjacent to [interposed on a structure comprising:] a complexable layer bearing two opposed faces, the innermost face of the [optional] bonding layer being placed adjacent to [interposed on] the outermost face of the complexable layer,

the innermost face of the complexable layer is placed adjacent to [interposed on] an outermost face of a pressure-sensitive adhesive layer bearing two opposed faces,

the innermost face of the pressure-sensitive adhesive layer is placed adjacent to [interposed on] a first face of a tearable-welding layer bearing two opposed faces;

wherein the cover comprises a welding layer with two opposed faces, the first face of which is placed adjacent to [interposed on] an innermost face of a support layer bearing two opposed faces;

wherein the second face of the tearable-welding layer and the second face of the welding layer are joined by welding along a seam in a welding region to form a welded seam; and

wherein the packaging is opened by separating the cover and the container in the welding region

[wherein the pressure-sensitive adhesive layer optionally comprises two pressure-sensitive adhesive sub-layers].

3. (Twice amended) The re-closable packaging according to claim 1 [2], in which the complexable layer [said structure] is joined to the bonding [support] layer by lamination.
5. (Twice amended) The re-closable packaging according to claim 1 [2], in which the complexable layer [said structure] is joined to the bonding [support] layer by extrusion-lamination.
6. (Twice amended) The re-closable packaging according to claim 3 [1], in which the bonding layer is a coextrusion binder [absent and in which the complexable layer is joined to the support layer by hot-calendering].
10. (Twice amended) The re-closable packaging according to claim 1, in which the packaging is opened by tearing and wherein the tearing takes place within the pressure-sensitive adhesive layer.
11. (Twice amended) The re-closable packaging according to claim 1, in which the tearable-welding layer has a first melting point, the pressure-sensitive adhesive layer has a second melting point, and the first melting point is greater than the second melting point.
15. (Twice amended) The re-closable packaging according to claim 14, in which the polyethylene is a metallocene polyethylene.
16. (Twice amended) The re-closable packaging according to claim 1, in which said complexable layer and said tearable-welding layer each have the same composition.
17. (Twice amended) The re-closable packaging according to claim 1, in which the pressure-sensitive adhesive layer [optionally] comprises two pressure-sensitive adhesive sub-layers, each sub-layer having the same composition.
18. (Twice amended) The re-closable packaging according to claim 17, in which a [said] structure comprising the complexable layer, the pressure-sensitive adhesive layer and the tearable-welding layer is obtained by collapsing a co-extrusion bubble.
19. (Twice amended) The re-closable packaging according to claim 18, in which the co-extrusion bubble is collapsed in an oxidizing medium.

20. (Twice amended) A re-closable packaging comprising a container and a cover;

wherein the container comprises a support layer bearing two opposed faces, the innermost face of which is joined to an outermost face of a bonding layer bearing two opposed faces by laminating;

the bonding layer is placed adjacent to [interposed on a structure comprising:] a complexable layer bearing two opposed faces, the innermost face of the bonding layer being placed adjacent to [interposed on] the outermost face of the complexable layer,

the innermost face of the complexable layer is placed adjacent to [interposed on] an outermost face of a pressure-sensitive adhesive layer bearing two opposed faces,

the innermost face of the pressure-sensitive adhesive layer is placed adjacent to [interposed on] a first face of a tearable-welding layer bearing two opposed faces;

wherein the cover comprises a welding layer with two opposed faces, the first face of which is placed adjacent to [interposed on] an innermost face of a support layer bearing two opposed faces;

wherein the second face of the tearable-welding layer and the second face of the welding layer are joined by welding along a seam in a welding region to form a welded seam; and

wherein the packaging is opened by separating the cover and the container in the welding region

[wherein the pressure-sensitive adhesive layer optionally comprises two pressure-sensitive adhesive sub-layers].

23. (Twice amended) The re-closable packaging according to claim 20, in which the packaging is opened by tearing and wherein the tearing takes place within the pressure-sensitive adhesive layer.

26. (Twice amended) The re-closable packaging according to claim 20, in which a [said] structure comprising the complexable layer, the pressure-sensitive adhesive layer and the tearable-welding layer is obtained by collapsing a co-extrusion bubble.

EXHIBIT B

CLEAN FORM OF ALL THE CLAIMS AS AMENDED U.S. PATENT APPLICATION SERIAL NO. 09/574,836

1. (Twice amended) A re-closable packaging comprising a container and a cover;

wherein the container comprises a support layer bearing two opposed faces, the innermost face of which is joined to a complexable layer by placing said face adjacent to an outermost face of a bonding layer bearing two opposed faces,

the bonding layer is placed adjacent to a complexable layer bearing two opposed faces, the innermost face of the bonding layer being placed adjacent to the outermost face of the complexable layer,

the innermost face of the complexable layer is placed adjacent to an outermost face of a pressure-sensitive adhesive layer bearing two opposed faces,

the innermost face of the pressure-sensitive adhesive layer is placed adjacent to a first face of a tearable-welding layer bearing two opposed faces;

wherein the cover comprises a welding layer with two opposed faces, the first face of which is placed adjacent to an innermost face of a support layer bearing two opposed faces;

wherein the second face of the tearable-welding layer and the second face of the welding layer are joined by welding along a seam in a welding region to form a welded seam;
and

wherein the packaging is opened by separating the cover and the container in the welding region.
2. Cancelled.
3. (Twice amended) The re-closable packaging according to claim 1, in which the complexable layer is joined to the bonding layer by lamination.
4. (Amended) The re-closable packaging according to claim 3, in which the bonding layer is a polyurethane adhesive.

5. (Twice amended) The re-closable packaging according to claim 1, in which the complexable layer is joined to the bonding layer by extrusion-lamination.
6. (Twice amended) The re-closable packaging according to claim 3, in which the bonding layer is a coextrusion binder.
7. (Amended) The re-closable packaging according to claim 1, in which said container is a tub.
8. (Amended) The re-closable packaging according to claim 1, in which said container is a flexible receptacle.
9. (Amended) The re-closable packaging according to claim 1, in which said container is thermoformed.
10. (Twice amended) The re-closable packaging according to claim 1, in which the packaging is opened by tearing and wherein the tearing takes place within the pressure-sensitive adhesive layer.
11. (Twice amended) The re-closable packaging according to claim 1, in which the tearable-welding layer has a first melting point, the pressure-sensitive adhesive layer has a second melting point, and the first melting point is greater than the second melting point.
12. (Amended) The re-closable packaging according to claim 1, in which said pressure-sensitive adhesive layer comprises a thermoplastic elastomer-based hot melt adhesive.
13. (Amended) The re-closable packaging according to claim 1, in which said adhesive is formed of from 5 to 25% by weight of a master batch comprising a substance chosen from the group consisting of a filler, a processing agent, and mixtures thereof.
14. (Amended) The re-closable packaging according to claim 1, in which the tearable-welding layer and the welding layer each comprise a polyethylene.
15. (Twice amended) The re-closable packaging according to claim 14, in which the polyethylene is a metallocene polyethylene.
16. (Twice amended) The re-closable packaging according to claim 1, in which said complexable layer and said tearable-welding layer each have the same composition.

17. (Twice amended) The re-closable packaging according to claim 1, in which the pressure-sensitive adhesive layer comprises two pressure-sensitive adhesive sub-layers, each sub-layer having the same composition.

18. (Twice amended) The re-closable packaging according to claim 17, in which a structure comprising the complexable layer, the pressure-sensitive adhesive layer and the tearable-welding layer is obtained by collapsing a co-extrusion bubble.

19. (Twice amended) The re-closable packaging according to claim 18, in which the co-extrusion bubble is collapsed in an oxidizing medium.

20. (Twice amended) A re-closable packaging comprising a container and a cover;

wherein the container comprises a support layer bearing two opposed faces, the innermost face of which is joined to an outermost face of a bonding layer bearing two opposed faces by laminating;

the bonding layer is placed adjacent to a complexable layer bearing two opposed faces, the innermost face of the bonding layer being placed adjacent to the outermost face of the complexable layer,

the innermost face of the complexable layer is placed adjacent to an outermost face of a pressure-sensitive adhesive layer bearing two opposed faces,

the innermost face of the pressure-sensitive adhesive layer is placed adjacent to a first face of a tearable-welding layer bearing two opposed faces;

wherein the cover comprises a welding layer with two opposed faces, the first face of which is placed adjacent to an innermost face of a support layer bearing two opposed faces;

wherein the second face of the tearable-welding layer and the second face of the welding layer are joined by welding along a seam in a welding region to form a welded seam; and

wherein the packaging is opened by separating the cover and the container in the welding region.

21. (Amended) The re-closable packaging according to claim 20, in which the bonding layer is a polyurethane adhesive.

22. (Amended) The re-closable packaging according to claim 20, in which said container is thermoformed.
23. (Twice amended) The re-closable packaging according to claim 20, in which the packaging is opened by tearing and wherein the tearing takes place within the pressure-sensitive adhesive layer.
24. (Amended) The re-closable packaging according to claim 20, in which said pressure-sensitive adhesive layer comprises a thermoplastic elastomer-based hot melt adhesive.
25. (Amended) The re-closable packaging according to claim 20, in which the tearable-welding layer and the welding layer each comprise a polyethylene.
26. (Twice amended) The re-closable packaging according to claim 20, in which a structure comprising the complexable layer, the pressure-sensitive adhesive layer and the tearable-welding layer is obtained by collapsing a co-extrusion bubble.
- 27-39. Cancelled.
40. (New) The re-closable packaging according to claim 1, wherein the pressure-sensitive adhesive layer comprises two pressure-sensitive adhesive sub-layers.
41. (New) The re-closable packaging according to claim 1, wherein the packaging is opened by separating the cover and the container in the welding region to form a first and a second pressure-sensitive adhesive sub-layer from the pressure-sensitive adhesive layer, the cover of the opened packaging comprising the first pressure-sensitive adhesive sub-layer and the container of the opened packaging comprising the second pressure-sensitive adhesive sub-layer.
42. (New) The re-closable packaging according to claim 20, wherein the pressure-sensitive adhesive layer comprises two pressure-sensitive adhesive sub-layers.
43. (New) The re-closable packaging according to claim 20, wherein the packaging is opened by separating the cover and the container in the welding region to form a first and a second pressure-sensitive adhesive sub-layer from the pressure-sensitive adhesive layer, the cover of the opened packaging comprising the first pressure-sensitive adhesive sub-layer and

the container of the opened packaging comprising the second pressure-sensitive adhesive sub-layer.

44. (New) A re-closable packaging comprising a container and a cover;

wherein the container comprises a support layer bearing two opposed faces, which is joined a complexable layer bearing two opposed faces, the innermost face of the support layer being placed adjacent to the outermost face of the complexable layer,

the innermost face of the complexable layer is placed adjacent to an outermost face of a pressure-sensitive adhesive layer bearing two opposed faces,

the innermost face of the pressure-sensitive adhesive layer is placed adjacent to a first face of a tearable-welding layer bearing two opposed faces;

wherein the cover comprises a welding layer with two opposed faces, the first face of which is placed adjacent to an innermost face of a support layer bearing two opposed faces;

wherein the second face of the tearable-welding layer and the second face of the welding layer are joined by welding along a seam in a welding region to form a welded seam;
and

wherein the packaging is opened by separating the cover and the container in the welding region.

45. (New) The re-closable packaging according to claim 44, wherein the pressure-sensitive adhesive layer comprises two pressure-sensitive adhesive sub-layers.

46. (New) The re-closable packaging according to claim 44, wherein the packaging is opened by separating the cover and the container in the welding region to form a first and a second pressure-sensitive adhesive sub-layer from the pressure-sensitive adhesive layer, the cover of the opened packaging comprising the first pressure-sensitive adhesive sub-layer and the container of the opened packaging comprising the second pressure-sensitive adhesive sub-layer.

47. (New) The re-closable packaging according to claim 44, wherein the complexable layer is joined to the support layer by hot-calendering.

48. (New) The re-closable packaging according to claim 44, wherein the complexable layer is joined to the support layer by extrusion-coating.
49. (New) The re-closable packaging according to claim 44, wherein said container is thermoformed.
50. (New) The re-closable packaging according to claim 44, wherein the packaging is opened by tearing and wherein the tearing takes place within the pressure-sensitive adhesive layer.
51. (New) The re-closable packaging according to claim 44, wherein said pressure-sensitive adhesive layer comprises a thermoplastic elastomer-based hot melt adhesive.
52. (New) The re-closable packaging according to claim 44, wherein the tearable-welding layer and the welding layer each comprise a polyethylene.

R sins and compounds (Cont'd)

Materials	Properties	ASTM test method	Polyester, thermosetting and alkyd (Cont'd)				Polyetheretherketone			Unfilled
			EMI shielding (conductive)		Alkyd molding compounds		Unfilled	30% glass fiber-reinforced	30% carbon fiber-reinforced	
			SMC, TMC	BMC	Granular and putty, mineral-filled	Glass fiber-reinforced				
Processing	1. Melting temperature, °C. T _m (crystalline) T _g (amorphous)		Thermoset	Thermoset	Thermoset	Thermoset	334	334	334	
	2. Processing temperature range, °F. (C = compression; T = transfer; I = injection; E = extrusion)		C: 270-380 I: 270-370 T: 280-320	C: 310-380 I: 300-370 T: 280-320	C: 270-350 I: 280-390 T: 320-360	C: 290-350 I: 280-380	I: 660-750 E: 660-720	I: 660-750	I: 660-800	215-217 640-800
	3. Molding pressure range, 10 ³ p.s.i.		0.5-2		2-20	2-25	10-20	10-20	10-20	10-20
	4. Compression ratio		1.0		1.8-2.5	1-11	3	2-3	2	1.5-3
	5. Mold (linear) shrinkage, in./in.	D955	0.0002-0.001	0.0005-0.004	0.003-0.010	0.001-0.010	0.011	0.002-0.014	0.0005-0.011	0.005-0.007
Mechanical	6. Tensile strength at break, p.s.i.	D638 ^b	7000-8000	4000-4500	3000-9000	4000-9500	10,200-15,000	22,500-28,500	29,800-33,000	14,000
	7. Elongation at break, %	D638 ^b					30-150	2-3	1-4	60
	8. Tensile yield strength, p.s.i.	D638 ^b					13,200			15,200
	9. Compressive strength (rupture or yield), p.s.i.	D695	20,000-24,000	18,000	12,000-38,000	15,000-36,000	18,000	21,300-22,400	25,000-34,400	20,300
	10. Flexural strength (rupture or yield), p.s.i.	D790	18,000-20,000	12,000	6000-17,000	8500-26,000	16,000	33,000-42,000	40,000-48,000	22,000
	11. Tensile modulus, 10 ³ p.s.i.	D638 ^b			500-3000	2000-2800		1250-1800	1860-3500	430
	12. Compressive modulus, 10 ³ p.s.i.	D895			2000-3000					420
	13. Flexural modulus, 10 ³ p.s.i. 73° F. 200° F. 250° F. 300° F.	D790 D790 D790 D790	1400-1500 1400-1500	2000 2000	560 435	1260-1600 1400	1860-2600 1750			480 370 360
	14. Izod impact, ft.-lb./in. of notch (1/8-in. thick specimen)	D256A	10-12	5-7	0.3-0.5	0.5-16	1.6	2.1-2.7	1.5-2.1	350
	15. Hardness Rockwell Shore/Barcol	D785 D2240/ D2583			E98	E95				1.0-1.2 M109-110
	16. Coef. of linear thermal expansion, 10 ⁻⁶ in./in./°C.	D696			20-50	15-33	<150°C: 40-47 <150°C: 108	<150°C: 12-22 >150°C: 44	<150°C: 15-22 >150°C: 5-11	47-56
	17. Deflection temperature under flexural load, °F. 264 p.s.i. 66 p.s.i.	D648 D648	395-400+ 400+	350-500 400-500	320	550-599	550-610			387-392 405-410
	18. Thermal conductivity, 10 ⁻⁴ cal.-cm./ sec.-cm. ² °C.	C177			12-25	15-25		4.9	4.9	1.6
Physical	19. Specific gravity	D792	1.75-1.80	1.80-1.85	1.6-2.3	2.0-2.3	1.30-1.32	1.49-1.54	1.42-1.44	1.27
	20. Water absorption (1/8-in. thick specimen), % 24 hr. Saturation	D570 D570	0.5 0.5	0.05-0.5 0.03-0.5	0.1-0.14	0.06-0.12	0.06-0.12	0.06-0.12	0.06-0.12	0.25 1.25
	21. Dielectric strength (1/8-in. thick specimen), short time, v/mil	D149		350-450	250-530					480
SUPPLIERS ^a			Applied Components; Ind. Dielectrics; Premix	Applied Components; Ind. Dielectrics; Premix	Am. Cyanamid; Occidental; Plastics Eng.; Plumb	Am. Cyanamid; Ind. Dielectrics; Occidental; Plumb; Rogers	ICI Americas; Tetrafluor	Akzo; ICI Americas; RTP; Tetrafluor	Akzo; ICI Americas; RTP; Tetrafluor	GE Plastics

a—See the Buyers' Guide, p. 811, for additional suppliers of specialty materials and custom compounds.
b—Tensile test method varies with material: D638 is standard for thermoplastics; D651 for rigid thermosetting plastics; D412 for elastomeric plastics; D882 for thin plastics sheeting.

c—Dry, as molded (approximately 0.2% moisture content).
d—As conditioned to equilibrium with 50% relative humidity.
e—Test method in ASTM D4092.
f—Pseudo indicates that the thermosetting and thermoplastic components were in the form of pellets or powder prior to fabrication.

erketone

Polyethylene and ethylene copolymers

(see also Thermoplastic elastomers)

Product	30% carbon fiber reinforced	Unfilled	30% glass fiber reinforced	EMI shielding (conductive); 30% carbon fiber	Low and medium density					High density	
					Polyethylene homopolymers		Ethylene copolymers				Polyethylene homopolymer
					Branched	Linear	Ethylene-vinyl acetate	Ethylene-vinyl alcohol	Ethylene-ethyl acrylate	Ethylene-methyl acrylate	
334					98-115	122-124	103-108	142-181	83	130-137	
		115-217	215	215	-25			55-69			
660-800		660-800	620-800	600-780	I: 300-450 E: 250-450	I: 350-500 E: 450-600	C: 200-300 I: 350-430 E: 300-380	I: 365-480 E: 365-480	C: 200-300 I: 250-500	E: 300-620	I: 350-500 E: 350-525
10-20		10-20	10-20	10-30	5-15	5-15	1-20		1-20		12-15
2		1.5-3	1.5-3	1.5-3	1.8-3.6	3		3-4			2
0.0005-0.014		0.005-0.007	0.001-0.002	0.0005-0.002	0.015-0.050	0.020-0.022	0.007-0.035		0.015-0.035		0.015-0.040
29,800-33,000		14,000	25,000-28,500	29,000-34,000	1200-4550	1900-4000	2200-4000	8520-11,600	1600-2100	1650	3200-4500
1-4		50	2-5	1-3	100-650	100-965	300-750	180-280	700-750	740	10-1200
		15,200	24,500		1300-2100	1400-2800	1200-6000	7385-10,365		1650	3800-4800
25,000-34,400		20,300	23,500-24,000	32,000					3000-3600		2700-3600
40,000-48,000		22,000	33,000	37,000-45,000				230-285			
1860-3500		430	1300-1600	2600-3300	25-41	38-75	7-29	300-385	4-7.5	12	155-158
		420	550								
1860-2600		480	1200-1300	2500-2600	35-48	40-105	7.7				145-225
1820		370	1100								
1750		360	1060								
1400		350	1040								
1.5-2.1		1.0-1.2	1.7-2.0	1.2-1.6	No break	1.0-No break	No break	1.1.7	No break		0.4-4.0
		M109-110	M125, R123	M127							
					Shore D44-50	Shore D55-56	Shore D17-45		Shore D27-38		Shore D66-73
22	<150°C: 15-22 >150°C: 5-44	47-56	20-21		100-220		160-200		160-250		59-110
550-610		387-392	408-420	405-420							
615		405-410	412-415	410-425	104-112						175-196
4.9		1.6	6.0-9.3	17.6	8						11-12
1.42-1.44		1.27	1.49-1.51	1.39-1.42	0.917-0.932	0.918-0.94	0.922-0.943	1.14-1.19	0.93	0.942-0.945	0.952-0.965
0.06-0.12		0.25	0.18-0.20	0.18-0.2	<0.01		0.005-0.13	6.7-8.6	0.04	0.0	<0.01
0.06		1.25	0.9								
		480	495-630		450-1000		620-760		450-550		450-500
Akzo; ICI America; RTP; Tetrafluor	GE Plastics	Akzo; GE Plastics; LNP; RTP; Thermofil	Akzo; LNP; RTP; Thermofil	Bamberger; Chevron; Dow Chem.; Du Pont; Eastman; Exxon; Monmouth; Novacor; Quantum, USI; Rexene; Union Carbide; Wash. Penn	Bamberger; Dow Chem.; Du Pont; Canada; Monmouth; Novacor; Quantum, USI; Soltex; Union Carbide	Chevron; Du Pont; Exxon; Quantum, USI; Rexene; Union Carbide	Eval Co. of America; Soltex; Quantum, USI	Union Carbide	Chevron	Allied; Amoco Chemicals; Bamberger; Chevron; Dow Chem.; Du Pont; Hoechst Celanese; M.A. Polymers; Monmouth; Phillips; Quantum, USI; Schutman; Shuman; Soltex; Union Carbide	

MODERN PLASTICS ENCYCLOPEDIA

A PLASTICS PRIMER 4

KEY WORD INDEX 12

TEXTBOOK 17

Resins and compounds 17

- Acetal 19
- Acrylic 20
- Allyl 142
- Bismaleimides 142
- Cellulosics 23
- Epoxy 144
- Fluoroplastics 25
- Ketone-based resins 26
- Liquid crystal polymers 42
- Melamine-formaldehyde 158
- Nitrile 28
- Nylon 30
- Phenolic 149
- Polyamide-imide 32
- Polyarylate 34
- Polybutylene 39
- Polycarbonate 41
- Polyester, thermoplastic 42
 - Liquid crystal polymers 42
 - Polybutylene terephthalate (PBT) 43
 - Polyethylene terephthalate (PET) 45
 - Reinforced PET 48
- Polyester, thermoset 150
- Polyetherimide 49
- Polyethylene 50
 - Branched polyethylene 79
 - Ethylene acid copolymer 81
 - Ethylene-ethyl acrylate 81
 - Ethylene-methyl acrylate 82
 - Ethylene-vinyl acetate 82
 - Ethylene-vinyl alcohol 84
 - Flexomers (ULDPE and VLDPE) 53
 - High-density polyethylene 75
 - HMW high-density polyethylene 75
 - Ionomer 86
 - Linear polyethylene 50
 - Linear low-density polyethylene 51
 - Low-density polyethylene 80
 - UHMW polyethylene 76
- Polyimide, thermoplastic 87
- Polyimide, thermoset 152
- Polymethylpentene 88
- Polyphenylene oxide, modified 90
- Polyphenylene sulfide 97
- Polypropylene 98
 - Polypropylene homopolymer 98
 - Polypropylene impact copolymers 100
 - Polypropylene random copolymers 101
- Polyurethane 153
- Silicones 155

- Styrenic resins 102
 - ABS 102
 - ACS 105
 - Acrylic-styrene-acrylonitrile 105
 - Crystal polystyrene 107
 - Expandable polystyrene 108
 - Impact polystyrene 108
 - Olefin-modified SAN 112
 - Polystyrene 106
 - Styrene-acrylonitrile (SAN) 110
 - Styrene-butadiene 112
 - Styrene-maleic anhydride 117
- Sulfone-based resins 118
 - Polyarylsulfone 118
 - Polyethersulfone 119
 - Polysulfone 120
- Thermoplastic elastomers (TPEs) 122
 - Elastomeric alloy TPEs 124
 - Engineering TPEs 125
 - Olefinic TPEs 128
 - Polyurethane TPEs 128
 - Styrenic TPEs 130
- Urea 158
- Vinyl-based resins 132
 - Chlorinated PVC 137
 - Dispersion PVC 137
 - PVC 132
 - Suspension PVC 139
 - Vinylidene chloride 140

Chemicals and additives 159

- Antifogging agents 161
- Antimicrobials 161
- Antioxidants 165
- Antistats 165
- Colorants 168
 - Color concentrates 175
 - Special colorants 172
- Coupling agents 175
 - Silanes 175
 - Titanates 177
- Flame retardants 179
- Fluorinated intermediates 182
- Foaming agents 184
- Fragrances 188
- Impact modifiers 190
- Lubricants 193
- Mold release agents 194
- Organic peroxides 197
- Plasticizers 200
- Polyurethane foam catalysts 203
- Smoke suppressants 181
- Stabilizers 204
 - Heat stabilizers 204
 - UV stabilizers 209
- Surface-active agents 210

Reinforced plastics and composites (including fillers) 213

- Composite raw materials 215
 - Bulk molding compounds (BMC) 215
 - Prepregs 215
 - Reinforced thermoplastics 216
 - Sheet molding compounds (SMC) 218
 - Stampable RP sheet 227
 - Thick molding compounds (TMC) 228

- Fibrous reinforcements 230
 - Aramids 230
 - Aramid hybrids 232
 - Carbon fibers 232
 - Carbon/glass hybrids 235
 - Ceramic fibers 235
 - Glass fibers 237
 - Metallic fibers 238
 - Thermoplastic fibers 239
- Fillers 240
 - Glass fillers 240
 - Mineral fillers 240

Primary processing 243

- Blow molding 245
 - Blow molds 250
 - Extrusion-blow molding 245
 - Injection-blow molding 247
 - Multilayer blow molding 248
- Calendering 252
- Casting of acrylic 254
- Casting of film 256
- Casting of nylon 258
- Compression molding 258
 - Compression molds 262
- Extrusion 262
 - Blown film extrusion 264
 - Extruder screen changers 271
 - Extrusion dies 268
 - Extrusion gear pumps 271
 - Gravimetric extrusion control 268
- Foam processing 272
 - Expandable PS foam molding 272
 - Foam extrusion 274
 - Polyurethane foam processing 279
 - Thermoplastic structural foam molding 278
- Injection molding 286
 - Injection molding thermoplastics 286
 - Injection molding thermosets 288
 - Injection molds 292
 - Multi-injection molding 290
- Radiation processing 293
- Reaction injection molding 294
- Reinforced plastics/composites processing 297
 - Automated tape placement 300
 - Compression molding RP 302
 - Continuous RP laminating 304
 - Filament winding 309
 - Open mold processing 310
 - Pultrusion and pulforming 310
 - Resin transfer molding 314
- Rotational molding 317
- Thermoforming 318
 - Solid phase pressure forming 322
 - Thermoforming molds 324
- Transfer molding 326

Auxiliary equipment and components 329

- CAD/CAM/CAE 331
- Chillers and associated equipment 334
 - Chillers and cooling towers 334
 - Liquid-circulating temperature controls 334

Coating equipment	339
Electrostatic coating	339
Extrusion coating and laminating	340
Roll coating	342
Controls and tests	343
Controls and instrumentation	343
Testing	346
Dryers	348
Film handling equipment	350
Biaxial orienting	350
Laminating	351
Granulators	355
Heaters	356
Materials handling	359
Mixing and compounding	361
Color measurement and control	370
Dry solids mixers	361
Fluxed melt mixers	361
Liquid and paste mixers	365
Motionless mixers	369
Pelletizing and dicing	372
Robots	373
Fabricating and finishing	377
Assembly of fabricated parts	379
Adhesive bonding	379
Electromagnetic bonding	381
Hot plate welding	382
Induction bonding	383
Insert bonding	385
Radio frequency sealing	386
Spin welding	388
Thermal welding	389
Thermotaking	390
Ultrasonic sealing	392
Vibration welding	393
Decorating and printing	394
Electroplating and sputtering	394
Embossing	396
Hot stamping	397
In-mold decorating with coatings	399
In-mold decorating with foils	400
Printing	400
Vacuum metallizing	403
EMI shielding and electrostatic discharge	404
By internal compounding	404
By mechanical means	405
By surface treatment	407
Post-production handling	408
Cutters	408
Pipe, tubing, and profile takeoff	410
Sheet takeoff	408
Design	413
Designing for rigidity and strength under static load	421
Designing with plastics	419
Dynamic mechanical properties of plastics by torsion pendulum	428
Redesigning with plastics: an introduction	415
Selecting plastics for chemical resistance	429
Selecting plastics for dielectric loss properties	443

Selecting plastics for elevated-temperature performance	424
Selecting plastics for fatigue resistance	432
Selecting plastics for flame retardance and smoke suppression	441
Selecting plastics for impact resistance	438
Selecting plastics for stress relaxation	434

ENGINEERING DATA BANK 551

Materials	553
Antistatic agents	644
Colorants	648
Creep	714
Environmental stress-crack resistance	740
Film and sheet	691
Flame retardants	662
Impact resistance	696
Laminates, by NEMA grades	688
Plasticizers	668
Resins and compounds	600
Specifications/materials	553
Stabilizers	678

Machinery 753

Blow molding	753
Compression molding	764
Extruders	774
Injection molding	781
Structural foam molding	789
Thermofforming	791
Transfer molding	804

BUYERS' GUIDE 809

Alphabetical index of companies and addresses 903

Classified index of products and services	811
Products and services	816
Custom processors and converters	892
Film, sheet, shapes, laminates	839
Foamed plastics	830
Instruments and controls	873
Machinery and equipment	847
Modifiers, additives, and fillers	831
Reinforcements and composites	846
Resins and compounds	816
Specialized services	882
Supplies	877

Advertisers' index 936

Advertisers' literature 929

Reader service cards 939-946

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